



August 1, 2022

Jeannette Jackson  
Division of Trading and Markets  
Office of Market Supervision  
Securities and Exchange Commission  
100 F. Street, N.E.  
Washington, D.C. 20549

**RE: Miami International Securities Exchange, LLC ("MIAX")  
Amendment 2022-11 to Form 1 Application**

Dear Ms. Jackson:

Enclosed for official filing pursuant to Rule 6a-2(a) is Amendment 2022-11 to the Form 1 Application of MIAX, which includes the following changes:

Exhibit C – Updated directors of MIAX Emerald, LLC  
Exhibit M – Updated member list

Please do not hesitate to contact me if you have any questions in connection with this matter.

Sincerely,

*Barbara J. Comly*

Barbara J. Comly  
EVP, General Counsel & Corporate Secretary

Enclosure  
cc: Marlene Olsen

7 Roszel Road, Suite 1A  
Princeton, New Jersey 08540

1450 Brickell Avenue  
Suite 1100, 11th Floor Loft  
Miami, Florida 33131

[miaxoptions.com](http://miaxoptions.com)

Form 1 Page 1 Execution Page	<b>UNITED STATES SECURITIES AND EXCHANGE COMMISSION</b> <b>WASHINGTON, D.C. 20549</b> <b>APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR,</b> <b>REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION</b> <b>FROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT</b>	Date filed (MM/DD/YY):  08/01/22	OFFICIAL USE ONLY
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Warning: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise comply with the provisions of law applying to the conduct of the applicant would violate the federal securities laws and may result in disciplinary, administrative or criminal action

INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS

APPLICATION  AMENDMENT

1. State the name of the applicant: Miami International Securities Exchange, LLC
2. Provide the applicant's primary street address (Do not use a P.O. Box): 7 Roszel Road, Suite 1A, Princeton, NJ 08540
3. Provide the applicant's mailing address (if different):
4. Provide the applicant's business telephone and facsimile number:  
Telephone: 609-897-7300; Facsimile: 609-987-2210
5. Provide the name, title and telephone number of a contact employee:  
Barbara J. Comly, EVP, General Counsel & Corporate Secretary  
609-897-7315
6. Provide the name and address of counsel for the applicant:  
Barbara J. Comly, EVP, General Counsel & Corporate Secretary  
Miami International Securities Exchange, LLC  
7 Roszel Road, Suite 1A  
Princeton, NJ 08540
7. Provide the date applicant's fiscal year ends: December 31
8. Indicate legal status of applicant:  Corporation  Sole Proprietorship  Partnership  
 Limited Liability Company  Other (specify):



22005449

If other than a sole proprietor, indicate the date and place where applicant obtained its legal status (e.g. state where incorporated, place where partnership agreement was filed or where applicant entity was formed):

- (a) Date (MM/DD/YY): 9/10/07                      (b) State/Country of formation: Delaware
- (c) Statute under which applicant was organized: Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.)

**EXECUTION:** The applicant consents that service of any civil action brought by, or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee at the main address, or mailing address if different, given in Items 2 and 3. The undersigned, being first duly sworn, deposes and says that he/she has executed this form on behalf of, and with the authority of, said applicant. The undersigned and applicant represent that the information and statements contained herein, including exhibits, schedules, or other documents attached hereto, and other information filed herewith, all of which are made a part hereof, are current, true, and complete.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Date: August 1, 2022

By: Barbara J. Comly  
Barbara J. Comly  
EVP, General Counsel & Corporate Secretary

Subscribed and sworn before me this \_\_\_\_ day of \_\_\_\_\_, 2022.

Based upon relief from Commission Staff and difficulties arising from COVID-19, Miami International Securities Exchange, LLC is making this filing without a notarization.

\_\_\_\_\_  
Notary Public of the State of New Jersey

**This page must always be completed in full with original, manual signature and notarization.**  
**Affix notary stamp or seal where applicable.**

## EXHIBIT C

### Exhibit Request:

For each subsidiary or affiliate of the applicant, and for any entity with whom the applicant has a contractual or other agreement relating to the operation of an electronic trading system to be used to effect transactions on the exchange (“System”), provide the following information:

1. Name and address of organization.
2. Form of organization (e.g., association, corporation, partnership, etc.).
3. Name of state and statute citation under which organized. Date of incorporation in present form.
4. Brief description of nature and extent of affiliation.
5. Brief description of business or functions. Description should include responsibilities with respect to operation of the System and/or execution, reporting, clearance, or settlement of transactions in connection with operation of the System.
6. A copy of the constitution.
7. A copy of the articles of incorporation or association including all amendments.
8. A copy of existing by-laws or corresponding rules or instruments.
9. The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions.
10. An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association.

### Response:

#### **A. MIAMI INTERNATIONAL HOLDINGS, INC.**

1. *Name:* Miami International Holdings, Inc.  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 1-101, et seq.), on November 14, 2007.

4. *Brief description of nature and extent of affiliation:* Miami International Securities Exchange, LLC is a wholly-owned subsidiary of Miami International Holdings, Inc. (“MIH”).
5. *Brief description of business or functions:* Miami International Holdings, Inc. is a holding company which holds 100% of the equity of Miami International Securities Exchange, LLC, MIAX PEARL, LLC, Miami International Technologies, LLC, MIAX Global, LLC, MIAX Emerald, LLC, MIAX Futures, LLC, MIAX Products, LLC, The Bermuda Stock Exchange and M 402 Holdings, LLC, the sole member and owner of 100% of the equity and voting securities of Minneapolis Grain Exchange, LLC. MIAX Futures, LLC is the owner of 51% of the outstanding membership interests in ConvexityShares, LLC. Miami International Holdings, Inc. is the entity through which the ultimate owners of the applicant indirectly hold their ownership interest in the applicant and its affiliates.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Incorporation dated October 16, 2015 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated By-Laws dated June 27, 2015 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Holdings, Inc.**

The following persons are the officers of Miami International Holdings, Inc.:

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Edward Deitzel	Executive Vice President and Chief Regulatory Officer
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
Mark G. Bagan	Executive Vice President – US Futures Strategy
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Randy Foster	Senior Vice President – Business Systems Development
Harish Jayabalan	Senior Vice President – Chief Information Security Officer
Matthew Rotella	Senior Vice President – Chief Technology Officer
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary

Name	Title
Joseph Bracco	Senior Vice President – Head of Sales
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Charles Blades	Vice President – Controller
Jonathan Dowd	Vice President – Business Strategy
Mitchell Garfinkel	Vice President – Finance
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Thomas Jarck	Vice President – Proprietary Product Development
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Matthew McFarland	Vice President – Derivative Products & Business Development
Kaitlin Meyer	Vice President – Marketing and Sales
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Vinay Rao	Vice President – Trading Systems Development
Siddharth Sahoo	Vice President – Trading Systems Development
Nicholas Scalabrino	Vice President – Head of Strategic and Business Planning and Functional Strategies for MIAX Pearl Equities
Christopher Solgan	Vice President – Senior Counsel
Tia Toms	Vice President – Administration
Gregory Ziegler	Vice President – Senior Counsel
Dimitriy Kotov	Assistant Vice President – Associate Counsel
Michael Slade	Assistant Vice President – Associate Counsel

The officers of Miami International Holdings, Inc. serve until their successors are appointed in accordance with the By-Laws of Miami International Holdings, Inc. Officers of Miami International Holdings, Inc. serve at the direction of the Board of Directors.

**Directors of Miami International Holdings, Inc.**

The following persons are the directors of Miami International Holdings, Inc.:

Name
Thomas P. Gallagher (Chairman)
Talal Jassim Al-Bahar
Abdulwahab Ahmad Al-Nakib
Sayer B. Al-Sayer
Michael P. Ameen

Albert M. Barro, Jr.
John Beckelman
Barry J. Belmont
Ricardo Blach
Christopher Brady
Khaled Magdy El-Marsafy
William W. Hopkins
Thomas J. Kelly, Jr.
Paul Kotos
Mark I. Massad
Jack G. Mondel
William J. O'Brien III
Robert D. Prunetti
Mark F. Raymond
Douglas M. Schafer, Jr.
Paul V. Stahlin
J. Gray Teekell
Jassem Hassan Zainal

Directors of Miami International Holdings, Inc. serve one year terms.

**Audit Committee of Miami International Holdings, Inc.**

The following persons are members of the Audit Committee of Miami International Holdings, Inc.:

Name
Paul V. Stahlin (Chairman)
Michael P. Ameen
Khaled Magdy El-Marsafy
Robert D. Prunetti

**Compensation Committee of Miami International Holdings, Inc.**

The following persons are members of the Compensation Committee of Miami International Holdings, Inc.:

Name
Talal Jassim Al-Bahar (Chairman)
Christopher D. Brady
Thomas J. Kelly
Mark F. Raymond
J. Gray Teekell

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

## **B. MIAX PEARL, LLC**

1. *Name:* MIAX PEARL, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on February 11, 2016.
4. *Brief description of nature and extent of affiliation:* MIAX PEARL, LLC ("MIAX PEARL") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX PEARL is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX PEARL operates fully electronic options and equities trading platforms.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Restated Certificate of Formation dated November 12, 2020 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated November 12, 2020 and Amended and Restated By-Laws dated February 11, 2021 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

### **Officers of MIAX PEARL, LLC**

The following persons are the officers of MIAX PEARL, LLC:

<b>Name</b>	<b>Title</b>
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Edward Deitzel	Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer

<b>Name</b>	<b>Title</b>
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Randy Foster	Senior Vice President – Business Systems Development
Harish Jayabalan	Senior Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Senior Vice President – Chief Technology Officer
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Joseph S. Bracco	Senior Vice President – Head of Sales
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Charles Blades	Vice President – Controller
Jonathan S. Dowd	Vice President – Business Strategy
Laurence Gardner	Vice President – Regulatory Operations
Mitchell Garfinkel	Vice President – Finance
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Thomas Jarck	Vice President – Proprietary Product Development
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Matthew McFarland	Vice President – Derivative Products and Business Development
Kaitlin Meyer	Vice President – Marketing and Sales
Ronald Miller	Vice President – Compliance
Lawrence O’Leary	Vice President – Regulatory Oversight
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Vinay Rao	Vice President – Trading Systems Development
Siddharth Sahoo	Vice President – Trading Systems Development
Nicholas Scalabrino	Vice President – Head of Strategic and Business Planning and Functional Strategies for MIAX Pearl Equities
Christopher Solgan	Vice President – Senior Counsel
Christopher Swisher	Vice President – Market Surveillance
Tia Toms	Vice President – Administration
Gregory Ziegler	Vice President – Senior Counsel
Dimitriy Kotov	Assistant Vice President – Associate Counsel

Name	Title
Michael Slade	Assistant Vice President – Associate Counsel

The officers of MIAX PEARL, LLC serve until their successors are appointed in accordance with the By-Laws of MIAX PEARL, LLC. Officers of MIAX PEARL, LLC will serve at the direction of the Board of Directors.

**Directors of MIAX PEARL, LLC**

The following persons are the directors of MIAX PEARL, LLC:

Name
Thomas P. Gallagher
Talal Jassim Al-Bahar
Sean Barry
William T. Bergman
David Brown
Lindsay L. Burbage
Guy Dowman
Kurt M. Eckert
Leslie Florio
Michael Harrington
Lawrence E. Jaffe
Paul Jiganti
Paul Kenyon
John E. McCormac
Miguel Moratiel
William J. O'Brien IV
Robert D. Prunetti
John Rothstein
Cynthia Schwarzkopf
Joseph Sellitto
Steven Sosnick
Erik Swanson
Christopher L. Whittington
George Wolf

**Committees of MIAX PEARL, LLC**

The standing committees of the Board and the persons appointed to sit on the standing committees are as follows:

<b>Compensation Committee</b>
Cynthia Schwarzkopf (Chair)
William T. Bergman
Robert D. Prunetti

<b>Audit Committee</b>
Robert D. Prunetti (Chair)
John E. McCormac
Cynthia Schwarzkopf

<b>Regulatory Oversight Committee</b>
Lindsay L. Burbage (Chair)
Leslie Florio
Lawrence E. Jaffe

<b>Appeals Committee</b>
Lawrence E. Jaffe (Chair)
Kurt M. Eckert
Guy Dowman

<b>Technology Committee</b>
Leslie Florio (Chair)
Sean Barry
David Brown
Kurt Eckert
John E. McCormac

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

## C. MIAX EMERALD, LLC

1. *Name:* MIAX Emerald, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on January 30, 2018.
4. *Brief description of nature and extent of affiliation:* MIAX Emerald, LLC ("MIAX Emerald") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Emerald is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX Emerald operates a fully electronic options trading platform.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated November 12, 2020 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated November 12, 2020 and Amended and Restated By-Laws dated November 12, 2020 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

### **Officers of MIAX Emerald, LLC**

The following persons are the officers of MIAX Emerald, LLC:

<b>Name</b>	<b>Title</b>
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Edward Deitzel	Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Randy Foster	Senior Vice President – Business Systems Development

<b>Name</b>	<b>Title</b>
Harish Jayabalan	Senior Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Senior Vice President – Chief Technology Officer
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Joseph S. Bracco	Senior Vice President – Head of Sales
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Charles Blades	Vice President – Controller
Jonathan S. Dowd	Vice President – Business Strategy
Laurence Gardner	Vice President – Regulatory Operations
Mitchell Garfinkel	Vice President – Finance
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Thomas Jarck	Vice President – Proprietary Product Development
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Matthew McFarland	Vice President – Derivative Products and Business Development
Kaitlin Meyer	Vice President – Marketing and Sales
Ronald Miller	Vice President – Compliance
Lawrence O’Leary	Vice President – Regulatory Oversight
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Vinay Rao	Vice President – Trading Systems Development
Siddharth Sahoo	Vice President – Trading Systems Development
Christopher Solgan	Vice President – Senior Counsel
Christopher Swisher	Vice President – Market Surveillance
Tia Toms	Vice President – Administration
Gregory Ziegler	Vice President – Senior Counsel
Dimitriy Kotov	Assistant Vice President – Associate Counsel
Michael Slade	Assistant Vice President – Associate Counsel

The officers of MIAX Emerald, LLC serve until their successors are appointed in accordance with the By-Laws of MIAX Emerald, LLC. Officers of MIAX Emerald, LLC will serve at the direction of the Board of Directors.

**Directors of MIAX Emerald, LLC**

The following persons are the directors of MIAX Emerald, LLC:

<b>Name</b>
Thomas P. Gallagher
Lindsay L. Burbage
Marianne Deane
Kurt M. Eckert
David S. Fleming
Leslie Florio
Kimberly M. Guadagno
Richard Herr
Paul Jiganti
Michael Juneman
Joseph M. Kyrillos Jr.
John E. McCormac
Robert D. Prunetti
Liam Smith

**Committees of MIAX Emerald, LLC**

The standing committees of the Board and the persons appointed to sit on the standing committees are as follows:

<b>Audit Committee</b>
Robert D. Prunetti (Chair)
Joseph M. Kyrillos Jr.
John E. McCormac

<b>Compensation Committee</b>
Robert D. Prunetti (Chair)
Marianne Deane
Joseph M. Kyrillos Jr.

<b>Regulatory Oversight Committee</b>
Lindsay L. Burbage (Chair)
Leslie Florio
Kimberly M. Guadagno

<b>Appeals Committee</b>
Marianne Deane (Chair)
Kurt M. Eckert
Paul Jiganti

<b>Technology Committee</b>
Leslie Florio (Chair)
Marianne Deane
David S. Fleming
John E. McCormac

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

#### **D. MIAMI INTERNATIONAL TECHNOLOGIES, LLC**

1. *Name:* Miami International Technologies, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on May 12, 2010.
4. *Brief description of nature and extent of affiliation:* Miami International Technologies, LLC ("MIAX Technologies") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Technologies engages in the sale and licensing of trading and information technology to unrelated third parties.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated June 29, 2011 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated June 25, 2021 is attached.

9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Miami International Technologies, LLC**

The following persons are the officers of Miami International Technologies, LLC:

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer, Jr.	President and Chief Information Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Matthew Rotella	Senior Vice President – Chief Technology Officer
Randy Foster	Senior Vice President – Business Systems Development
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Rodney Hester	Senior Vice President – Systems Infrastructure
Harish Jayabalan	Senior Vice President – Chief Information Security Officer
Charles Blades	Vice President – Controller
Mitchell Garfinkel	Vice President – Finance
James O’Neil	Vice President and Director of Physical Security and Safety
Tia Toms	Vice President – Administration

**Directors of Miami International Technologies, LLC**

The following persons are the directors of Miami International Technologies, LLC:

Name
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

## **E. MIAX FUTURES, LLC**

1. *Name:* MIAX Futures, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on November 30, 2007.
4. *Brief description of nature and extent of affiliation:* MIAX Futures, LLC ("MIAX Futures") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Futures is the owner of 51% of the outstanding membership interests in ConvexityShares, LLC.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Restated Certificate of Formation dated March 10, 2021 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated March 10, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

### **Officers of MIAX Futures, LLC**

The following persons are the officers of MIAX Futures, LLC:

<b>Name</b>	<b>Title</b>
Thomas P. Gallagher	Chairman
Joseph W. Ferraro III	President
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Randy Foster	Senior Vice President – Business Systems Development
Matthew Rotella	Senior Vice President – Chief Technology Officer
Thomas Jarck	Vice President – Proprietary Product Development
Matthew McFarland	Vice President – Derivative Products and Business Development

### **Directors of MIAX Futures, LLC**

The following persons are the directors of MIAX Futures, LLC:

Name
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

### **F. THE BERMUDA STOCK EXCHANGE**

- Name:* The Bermuda Stock Exchange  
*Address:* 110 Pitts Bay Road, 4<sup>th</sup> Floor, Pembroke, Bermuda HM 08
- Form of organization:* A body corporate incorporated pursuant to The Bermuda Stock Exchange Act 1992.
- Name of state, statute under which organized and date of incorporation:* Bermuda, The Bermuda Stock Exchange Company Act 1992, on March 10, 1993.
- Brief description of nature and extent of affiliation:* Miami International Holdings, Inc., which is the applicant's 100% owner, is the owner of 100% of the outstanding shares of The Bermuda Stock Exchange ("BSX").
- Brief description of business or functions:* Stock Exchange located in Pembroke, Bermuda.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Memorandum of Association dated March 10, 1993, is attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Bye-Laws dated July 21, 2003, are attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

### **Officers of The Bermuda Stock Exchange**

The following persons are the officers of The Bermuda Stock Exchange:

Name	Title
Gregory A. Wojciechowski	President & Chief Executive Officer
Gregory A. Wojciechowski	Secretary
James McKirdy	Chief Compliance Officer

Name	Title
Jacintha Pogson-Hughes	Chief Administration Officer

**Council (Directors) of The Bermuda Stock Exchange**

The following persons are the council of The Bermuda Stock Exchange:

Council
Thomas P. Gallagher (Chairman)
David Brown (Deputy Chairman)
Jeff Conyers
Kurt M. Eckert
Caroline Kennedy
Mark Massad
Michael Neff
Eric Sites
Murray Stahl
Gregory A. Wojciechowski

**Committees of The Bermuda Stock Exchange**

Business Development Committee
Eric Sites
Jeff Conyers
Michael Neff
Gregory A. Wojciechowski

Compensation Committee
Thomas P. Gallagher
David Brown
Jeff Conyers
Michael Neff

Executive Management Committee
Thomas P. Gallagher
David Brown
Jeff Conyers
Michael Neff

<b>Listing Committee</b>
Dudley Cottingham
Sharon Beesley
Miguel DaPonte
Susan Monkman
Marco Montarsolo
Gregory A. Wojciechowski

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**G. M 402 HOLDINGS, LLC**

- Name:* M 402 Holdings, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- Form of organization:* Limited Liability Company.
- Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on June 27, 2020.
- Brief description of nature and extent of affiliation:* M 402 Holdings, LLC ("M 402") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner. Minneapolis Grain Exchange, LLC ("MGEX") is a wholly-owned subsidiary of M 402.
- Brief description of business or functions:* M 402 is a holding company for the equity and voting securities of MGEX.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated July 27, 2020 is attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Limited Liability Company Agreement dated July 30, 2020 and By-Laws dated July 30, 2020 are attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of M 402 Holdings, LLC**

The following persons are the officers of M 402 Holdings, LLC:

<b>Name</b>	<b>Title</b>
Thomas P. Gallagher	Chairman and Chief Executive Officer

Name	Title
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer

**Directors of M 402 Holdings, LLC**

The following persons are the directors of M 402 Holdings, LLC:

Name
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**H. MINNEAPOLIS GRAIN EXCHANGE, LLC**

1. *Name:* Minneapolis Grain Exchange, LLC  
*Address:* 400 S 4th St, Minneapolis, MN 55415
2. *Form of organization:* Limited Liability Corporation.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on December 4, 2020.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of M 402 Holdings, LLC, which in turn is the sole member and owner of 100% of the equity and voting securities of Minneapolis Grain Exchange, LLC (“MGEX”).
5. *Brief description of business or functions:* MGEX is a designated contract market and derivatives clearing organization that operates under the regulatory oversight of the Commodity Futures Trading Commission pursuant to Section 5 of the Commodity Exchange Act 7 U.S.C. §7. MGEX is also registered as a national securities exchange under Section 6(g) of Securities Exchange Act.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated December 4, 2020 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Limited Liability Company Agreement dated December 4, 2020 and Bylaws dated December 4, 2020 are attached.

9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of Minneapolis Grain Exchange, LLC**

The following persons are the officers of Minneapolis Grain Exchange, LLC:

<b>Name</b>	<b>Title</b>
Mark G. Bagan	President & Chief Executive Officer
Layne G. Carlson	Treasurer, Secretary, Chief Compliance Officer & Chief Regulatory Officer
James D. Facente, Jr.	Director & Chief Risk Officer – Clearing & IT

**Directors of Minneapolis Grain Exchange, LLC**

The following persons are the directors of Minneapolis Grain Exchange, LLC:

<b>Name</b>
Thomas P. Gallagher, Chair
De’Ana H. Dow
Michael V. Dunn
Steve Fanady
Bradley Griffith
Christopher T. Matzdorf
Kerry L. Melius
Murray Stahl

**Standing Committees of Minneapolis Grain Exchange, LLC**

<b>Executive Committee</b>
Thomas P. Gallagher, Chairperson
Kerry L. Melius, First Vice Chairperson
Steve Fanady, Second Vice Chairperson
Bradley Griffith
Murray Stahl
Mark G. Bagan*

<b>Audit Committee</b>
Thomas P. Gallagher, Chairperson
Mark G. Bagan
De’Ana H. Dow
Michael V. Dunn
Bradley Griffith

<b>Nominations Committee</b>
Bradley Griffith, Chairperson
De'Ana H. Dow
Michael V. Dunn
Thomas P. Gallagher
Christopher T. Matzdorf
Mark G. Bagan*

<b>Regulatory Oversight Committee</b>
Steve Fanady, Chairperson
De'Ana H. Dow
Michael V. Dunn
Thomas P. Gallagher*
Mark G. Bagan*

<b>Risk Management Committee</b>
Bradley Griffith, Chairperson
De'Ana H. Dow
Steve Fanady
Thomas P. Gallagher*
Mark G. Bagan*

\* Ex officio committee member

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

## **I. MIAX GLOBAL, LLC**

1. *Name:* MIAX Global, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on June 30, 2015.
4. *Brief description of nature and extent of affiliation:* MIAX Global, LLC ("MIAX Global") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.

5. *Brief description of business or functions:* MIAX Global focuses on the company's trading, technology and other projects primarily based outside the United States.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated June 25, 2021 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated June 25, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of MIAX Global, LLC**

The following persons are the officers of MIAX Global, LLC:

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President
Lance Emmons	Executive Vice President and Chief Financial Officer
Gregory A. Wojciechowski	President

**Directors of MIAX Global, LLC**

The following persons are the directors of MIAX Global, LLC:

Name
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**J. MIAX PRODUCTS, LLC**

1. *Name:* MIAX Products, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Illinois, Illinois Limited Liability Company Act, 805 ILCS 180, on January 25, 2019.

4. *Brief description of nature and extent of affiliation:* MIAX Products, LLC ("MIAX Products") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* Development of financial products.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Restated Articles of Organization dated October 5, 2021 are attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated October 5, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Officers of MIAX Products, LLC**

The following persons are the officers of MIAX Products, LLC:

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Douglas M. Schafer, Jr.	Chief Information Officer and Executive Vice President

**Directors of MIAX Products, LLC**

The following persons are the directors of MIAX Products, LLC:

Name
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**K. BSD NOMINEE LIMITED**

1. *Name:* BSD Nominee Limited  
*Address:* 110 Pitts Bay Road, 4<sup>th</sup> Floor, Pembroke, Bermuda HM 08
2. *Form of organization:* A body corporate incorporated pursuant to Bermuda, The Companies Act 1981.

3. *Name of state, statute under which organized and date of incorporation:* Organized in Bermuda under The Companies Act 1981 on October 24, 2001. Registered in Bermuda under Section 14 of The Companies Act 1981 on November 1, 2001.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc., which is the applicant's 100% owner, is the owner of 100% of the outstanding shares of The Bermuda Stock Exchange ("BSX"). BSX is the owner of 100% of the outstanding shares of BSD Nominee Limited.
5. *Brief description of business or functions:* To be the legal owner of shares held for the benefit of account holders of the Bermuda Securities Depository of BSX and to provide nominee services in relation to such shares.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Memorandum of Association dated October 24, 2001, and related documents is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* Not applicable.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Council (Directors) of BSD Nominee Limited**

The following persons are the council of BSD Nominee Limited:

Council
Gregory A. Wojciechowski
James McKirdy

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

**L. CONVEXITYSHARES, LLC**

1. *Name:* ConvexityShares, LLC  
*Address:* 7 Roszel Road, Suite 1A, Princeton, NJ 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on December 3, 2020.

4. *Brief description of nature and extent of affiliation:* MIAX Futures, LLC, which is wholly-owned by Miami International Holdings, Inc., the applicant's 100% owner, is the owner of 51% of the outstanding membership interests of ConvexityShares, LLC.
5. *Brief description of business or functions:* Sponsor of certain exchange-traded products. ConvexityShares, LLC is a registered Commodity Pool Operator (CPO) and Commodity Trading Advisor (CTA) with the National Futures Association (NFA).
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated December 3, 2020 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Limited Liability Company Operating Agreement dated February 5, 2021 and First Amendment to Limited Liability Company Operating Agreement dated March 10, 2021 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

**Managers of ConvexityShares, LLC**

The following are the managers of ConvexityShares, LLC:

Name
MIAX Futures, LLC
T3i US Holdings Inc.

**Officers of ConvexityShares, LLC**

The following persons are the officers of ConvexityShares, LLC:

Name	Title
John Zhu	Chief Executive Officer & Chief Compliance Officer
Simon Ho	President
Melinda Ho	Treasurer, Chief Financial Officer & Secretary
Charles Blades	Controller

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

## **EXHIBIT M**

### **Exhibit Request:**

Provide an alphabetical list of all members, subscribers or other users, including the following information:

1. **Name;**
2. **Date of election to membership or acceptance as a member, subscriber or other user;**
3. **Principal business address and telephone number;**
4. **If member, subscriber or other user is an individual, the name of the entity with which such individual is associated and the relationship of such individual to the entity (e.g. partner, officer, director, employee, etc.);**
5. **Describe the type of activities primarily engaged in by the member, subscriber, or other user (e.g. floor broker, specialist, odd lot dealer, other market maker, proprietary trader, non-broker dealer, inactive or other functions). A person shall be “primarily engaged” in an activity or function for purposes of this item when that activity or function is the one in which that person is engaged for the majority of their time. When more than one type of person at an entity engages in any of the six types of activities or functions enumerated in this item, identify each type (e.g. proprietary trader, Registered Competitive Trader and Registered Competitive Market Maker) and state the number of participants, subscribers, or other users in each; and**
6. **The class of membership, participation or subscription or other access.**

### **Response:**

Attached is a list of the members of the Exchange as of August 1, 2022, including the information set forth in items 1-6 above.

**ABN AMRO CLEARING CHICAGO LLC**

175 West Jackson Blvd., Ste. 2050  
 Chicago IL 60604  
 Tele #: (312) 604-8000

Approval Date: 3/7/2013  
**Membership Activities:**  
 Clearance  
 International Tele #

SEC #: 8-34354  
 CRD #: 14020

**AKUNA SECURITIES LLC**

333 S. Wabash Avenue, Suite 2600  
 Chicago IL 60604  
 Tele #: (312) 994-4640

Approval Date: 4/17/2017  
**Membership Activities:**  
 Registered Market Maker  
 International Tele #

SEC #: 8-68957  
 CRD #: 159041

**APEX CLEARING CORPORATION**

One Dallas Center  
 350 N. St. Paul, Suite 1300  
 Dallas TX 75201  
 Tele #: (214) 765-1100

Approval Date: 11/18/2015  
**Membership Activities:**  
 Clearance  
 International Tele #

SEC #: 8-23522  
 CRD #: 13071

**AXOS CLEARING LLC**

15950 West Dodge Road - Suite 300  
 Omaha NE 68118  
 Tele #: (402) 384-6100

Approval Date: 4/11/2022  
**Membership Activities:**  
 Clearance  
 International Tele #

SEC #: 8-53595  
 CRD #: 117176

**BARCLAYS CAPITAL INC.**

745 Seventh Avenue  
 New York NY 10019  
 Tele #: (212) 526-7000

Approval Date: 12/7/2012  
**Membership Activities:**  
 Order Entry & Clearance  
 International Tele #

SEC #: 8-41342  
 CRD #: 19714

**BELVEDERE TRADING LLC**

10 S. Riverside Plaza, Suite 2100  
 Chicago IL 60606  
 Tele #: (312) 893-3750

Approval Date: 8/1/2022  
**Membership Activities:**  
 Primary Lead, Lead & Registered Market Maker  
 International Tele #

SEC #: 8-66612  
 CRD #: 132605

**BMO CAPITAL MARKETS CORP.**

151 W. 42nd Street, 9th Floor  
 New York NY 10036  
 Tele #: (212) 885-4000

Approval Date: 10/10/2014  
**Membership Activities:**  
 Order Entry & Clearance  
 International Tele #

SEC #: 8-34344  
 CRD #: 16686

**BNP PARIBAS SECURITIES CORP.**

787 Seventh Avenue  
 New York NY 10019  
 Tele #: (212) 841-2000

Approval Date: 4/21/2014  
**Membership Activities:**  
 Order Entry & Clearance  
 International Tele #

SEC #: 8-32682  
 CRD #: 15794

**BOFA SECURITIES, INC.**

One Bryant Park  
 New York NY 10036  
 Tele #: (646) 743-2734

Approval Date: 11/1/2018  
**Membership Activities:**  
 Order Entry & Clearance  
 International Tele #

SEC #: 8-69787  
 CRD #: 283942

**CITADEL SECURITIES LLC**

131 South Dearborn Street - 32nd Floor

Chicago IL 60603

Tele #: (312) 395-2100

Approval Date: 12/7/2012

SEC #: 8-53574

**Membership Activities:**

CRD #: 116797

Primary Lead, Lead, Registered Market Maker &amp; Order Entry

International Tele #

**CITIGROUP GLOBAL MARKETS INC.**

Tower Building

388 Greenwich Street

New York NY 10013

Tele #: (212) 816-6000

Approval Date: 5/1/2019

SEC #: 8-8177

**Membership Activities:**

CRD #: 7059

Order Entry &amp; Clearance

International Tele #

**CREDIT SUISSE SECURITIES (USA) LLC**

11 Madison Avenue - 24th Floor

New York NY 10010

Tele #: (212) 325-2000

Approval Date: 12/7/2012

SEC #: 8-00422

**Membership Activities:**

CRD #: 816

Order Entry &amp; Clearance

International Tele #

**CUTLER GROUP, LP**

101 Montgomery Street, Ste. 700

San Francisco CA 94104

Tele #: (415) 293-3956

Approval Date: 11/2/2015

SEC #: 8-42415

**Membership Activities:**

CRD #: 31730

Registered Market Maker

International Tele #

**DASH FINANCIAL TECHNOLOGIES LLC**

311 S. Wacker Drive, Ste. 1000

Chicago IL 60606

Tele #: (312) 986-2006

Approval Date: 12/7/2012

SEC #: 8-52503

**Membership Activities:**

CRD #: 104031

Order Entry &amp; Clearance

International Tele #

**DRW SECURITIES, L.L.C.**

540 West Madison, Ste. 2500

Chicago IL 60661

Tele #: (312) 542-1000

Approval Date: 8/31/2015

SEC #: 8-51241

**Membership Activities:**

CRD #: 45908

Order Entry

International Tele #

**GLOBAL EXECUTION BROKERS, LP**

401 City Avenue, Ste. 200

Bala Cynwyd PA 19004

Tele #: (610) 617-2600

Approval Date: 12/7/2012

SEC #: 8-65878

**Membership Activities:**

CRD #: 126407

Order Entry

International Tele #

**GOLDMAN SACHS & CO. LLC**

200 West Street

New York NY 10282

Tele #: (212) 902-1000

Approval Date: 1/15/2013

SEC #: 8-129

**Membership Activities:**

CRD #: 361

Order Entry &amp; Clearance

International Tele #

**GROUP ONE TRADING LP**

425 S. Financial Place - Ste. 3400

Chicago IL 60605

Tele #: (312) 347-8864

Approval Date: 10/20/2014

SEC #: 8-47762

**Membership Activities:**

CRD #: 37484

Primary Lead, Lead, Registered Market Maker &amp; Order Entry

International Tele #

**GTS SECURITIES LLC**

545 Madison Avenue, 15th Fl.  
New York NY 10022  
Tele #: (212) 715-2830

Approval Date: 2/25/2020

SEC #: 8-68126

**Membership Activities:**

CRD #: 149224

Primary Lead, Lead & Registered Market Maker  
International Tele #

**HRT FINANCIAL LP**

175 Greenwich Street - 76th Floor  
3 World Trade Center  
New York NY 10007  
Tele #: (212) 293-1444

Approval Date: 3/29/2017

SEC #: 8-68430

**Membership Activities:**

CRD #: 152144

Registered Market Maker & Order Entry  
International Tele #

**IMC-CHICAGO, LLC D/B/A IMC FINANCIAL MARKETS**

233 South Wacker Drive, Ste. 4300  
Chicago IL 60606  
Tele #: (312) 244-3300

Approval Date: 8/26/2014

SEC #: 8-52600

**Membership Activities:**

CRD #: 104143

Primary Lead, Lead & Registered Market Maker  
International Tele #

**INSTINET, LLC**

Worldwide Plaza  
309 West 49th Street  
New York NY 10019  
Tele #: (212) 310-9500

Approval Date: 3/27/2013

SEC #: 8-23669

**Membership Activities:**

CRD #: 7897

Order Entry & Clearance  
International Tele #

**INTERACTIVE BROKERS LLC**

One Pickwick Plaza - 2nd Floor  
Greenwich CT 06830  
Tele #: (203) 618-5710

Approval Date: 12/7/2012

SEC #: 8-47257

**Membership Activities:**

CRD #: 36418

Order Entry & Clearance  
International Tele #

**J.P. MORGAN SECURITIES LLC**

383 Madison Avenue  
New York NY 10179  
Tele #: (212) 272-2000

Approval Date: 12/7/2012

SEC #: 8-35008

**Membership Activities:**

CRD #: 79

Order Entry & Clearance  
International Tele #

**JANE STREET CAPITAL, LLC**

250 Vesey Street - 5th Floor  
New York NY 10281  
Tele #: (646) 759-6000

Approval Date: 4/2/2018

SEC #: 8-52275

**Membership Activities:**

CRD #: 103782

Order Entry  
International Tele #

**JANE STREET OPTIONS, LLC**

250 Vesey Street - 5th Floor  
New York NY 10281  
Tele #: (646) 759-6000

Approval Date: 4/2/2018

SEC #: 8-66813

**Membership Activities:**

CRD #: 134159

Registered Market Maker & Order Entry  
International Tele #

**JEFFERIES LLC**

520 Madison Avenue - 11th Floor  
New York NY 10022  
Tele #: (212) 284-2300

Approval Date: 9/15/2014

SEC #: 8-15074

**Membership Activities:**

CRD #: 2347

Order Entry & Clearance  
International Tele #

**JUMP TRADING, LLC**

600 West Chicago Avenue, Ste. 600

Chicago IL 60654

Tele #: (312) 205-8900

Approval Date: 12/9/2019

SEC #: 8-52989

**Membership Activities:**

CRD #: 106124

Registered Market Maker

International Tele #

**MATRIX EXECUTIONS, LLC**

135 S. LaSalle Street, Ste. 3900

Chicago IL 60603

Tele #: (312) 334-8000

Approval Date: 12/7/2012

SEC #: 8-48255

**Membership Activities:**

CRD #: 38455

Order Entry

International Tele #

**MERRILL LYNCH PROFESSIONAL CLEARING CORP.**

One Bryant Park - 6th Floor

NY1-100-06-01

New York NY 10036

Tele #: (646) 743-1295

Approval Date: 12/7/2012

SEC #: 8-33359

**Membership Activities:**

CRD #: 16139

Clearance

International Tele #

**MORGAN STANLEY & CO. LLC**

1585 Broadway

New York NY 10036

Tele #: (212) 761-4000

Approval Date: 12/7/2012

SEC #: 8-15869

**Membership Activities:**

CRD #: 8209

All Market Maker &amp; Electronic Exchange Options Memberships

International Tele #

**OPTIVER US LLC**

130 E. Randolph Street, Ste. 1300

Chicago IL 60601

Tele #: (312) 821-9500

Approval Date: 1/27/2015

SEC #: 8-66083

**Membership Activities:**

CRD #: 128030

Primary Lead, Lead &amp; Registered Market Maker

International Tele #

**PEAK6 CAPITAL MANAGEMENT LLC**

141 W. Jackson Blvd., Ste. 500

Chicago IL 60604

Tele #: (312) 444-8000

Approval Date: 7/22/2015

SEC #: 8-8-50422

**Membership Activities:**

CRD #: 43773

Order Entry

International Tele #

**PERSHING LLC**

One Pershing Plaza - 10th Fl.

Jersey City NJ 07399

Tele #: (201) 413-2000

Approval Date: 3/12/2013

SEC #: 8-17574

**Membership Activities:**

CRD #: 7560

Order Entry &amp; Clearance

International Tele #

**RQD\* CLEARING, LLC**

425 South Financial Place - Suite 910B

Chicago IL 60605

Tele #: (312) 692-5000

Approval Date: 12/7/2012

SEC #: 8-66826

**Membership Activities:**

CRD #: 134284

Order Entry &amp; Clearance

International Tele #

**SIMPLEX TRADING, LLC**

230 So. LaSalle St., Ste. 4-100

Chicago IL 60604

Tele #: (312) 360-2440

Approval Date: 9/20/2013

SEC #: 8-68556

**Membership Activities:**

CRD #: 153585

Order Entry

International Tele #

**SUSQUEHANNA INVESTMENT GROUP**

401 City Avenue, Ste. 220  
 Bala Cynwyd PA 19004  
 Tele #: (610) 617-2600

Approval Date: 11/23/2016

SEC #: 8-37520

**Membership Activities:**

CRD #: 33875

Registered Market Maker

International Tele #

**SUSQUEHANNA SECURITIES, LLC**

401 City Avenue, Ste. 220  
 Bala Cynwyd PA 19004  
 Tele #: (610) 617-2600

Approval Date: 12/7/2012

SEC #: 8-47034

**Membership Activities:**

CRD #: 35874

Primary Lead, Lead &amp; Registered Market Maker

International Tele #

**TWO SIGMA SECURITIES, LLC**

100 Avenue of the Americas - 2nd Fl.  
 New York NY 10013  
 Tele #: (212) 625-5700

Approval Date: 9/12/2017

SEC #: 8-68090

**Membership Activities:**

CRD #: 148960

Primary Lead, Lead &amp; Registered Market Maker

International Tele #

**UBS SECURITIES LLC**

1285 Avenue of the Americas  
 New York NY 10019  
 Tele #: (203) 719-3000

Approval Date: 12/7/2012

SEC #: 8-22651

**Membership Activities:**

CRD #: 7654

Order Entry &amp; Clearance

International Tele #

**WALLEYE TRADING LLC**

2800 Niagara Lane North, Ste. 102  
 Plymouth MN 55447  
 Tele #: (952) 345-6611

Approval Date: 5/13/2015

SEC #: 8-66988

**Membership Activities:**

CRD #: 136196

Registered Market Maker &amp; Order Entry

International Tele #

**WEDBUSH SECURITIES INC.**

1000 Wilshire Boulevard, Suite 900  
 ATTN: COMPLIANCE  
 Los Angeles CA 90017  
 Tele #: (213) 688-8090

Approval Date: 12/7/2012

SEC #: 8-12987

**Membership Activities:**

CRD #: 877

Clearance

International Tele #

**WELLS FARGO SECURITIES, LLC**

550 South Tryon Street - 6th Floor  
 D1086-060  
 Charlotte NC 28202  
 Tele #: (704) 410-1913

Approval Date: 4/11/2014

SEC #: 8-65876

**Membership Activities:**

CRD #: 126292

Order Entry &amp; Clearance

International Tele #

**WOLVERINE EXECUTION SERVICES, LLC**

175 W. Jackson Blvd., Ste. 200  
 Chicago IL 60604  
 Tele #: (312) 884-4000

Approval Date: 12/7/2012

SEC #: 8-65336

**Membership Activities:**

CRD #: 120719

Order Entry &amp; Clearance

International Tele #

**WOLVERINE TRADING, LLC**

175 W. Jackson Blvd., Ste. 200  
 Chicago IL 60604  
 Tele #: (312) 884-4000

Approval Date: 12/7/2012

SEC #: 8-47484

**Membership Activities:**

CRD #: 36848

Primary Lead, Lead &amp; Registered Market Maker

International Tele #

**X-CHANGE FINANCIAL ACCESS, LLC**

440 So. LaSalle Street, Suite 2900  
Chicago IL 60605  
Tele #: (312) 235-0320

Approval Date: 11/28/2018  
**Membership Activities:**  
Order Entry & Clearance  
International Tele #

SEC #: 8-65860  
CRD #: 126201

**Total BD Firms 46**